

ORIGINAL TO GENERAL FILES

D.O.T. 66

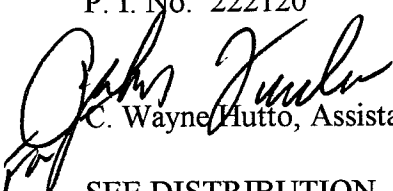
**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA**

INTERDEPARTMENT CORRESPONDENCE

FILE EDS-545(29) Jefferson County
P. I. No. 222120

OFFICE Preconstruction

DATE October 12, 2001

FROM  C. Wayne Hutto, Assistant Director of Preconstruction

TO SEE DISTRIBUTION

SUBJECT REVISED PROJECT CONCEPT REPORT APPROVAL

Attached for your files is the approval for subject project.

CWH/cj

Attachment

DISTRIBUTION:

Tom Turner
David Mulling
Harvey Keepler
Jerry Hobbs
Herman Griffin
Michael Henry
Phillip Allen
Marta Rosen
Jimmy Chambers
Mike Thomas
BOARD MEMBER

D.O.T. 66

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE EDS-545(29) Jefferson County
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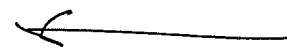
OFFICE Preconstruction

DATE October 10, 2001

FROM 
C. Wayne Hutto, Assistant Director of Preconstruction

TO SEE DISTRIBUTION

SUBJECT ^{REVISED} ¹ PROJECT CONCEPT REPORT APPROVAL



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INTERDEPARTMENTAL CORRESPONDENCE

FILE EDS-545(29), Jefferson County
PI # 222120

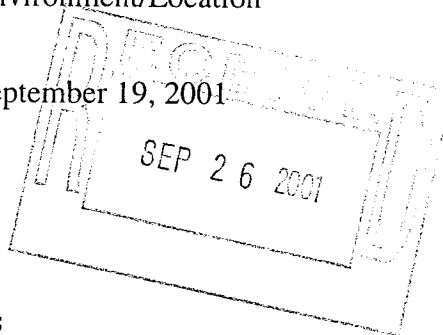
OFFICE Environment/Location

DATE September 19, 2001

FROM *HDK/101*
Harvey D. Keepler, State Environmental/Location Engineer

TO C. Wayne Hutto, Assistant Director of Preconstruction

SUBJECT **Revised Project Concept Report – US 1/SR 4 Improvements**



Attached is the original copy of the revised Concept Report for your further handling for approval in accordance with the Plan Development Process (PDP).

For EDS-545(29), the proposed change to the approved concept would be revisions to the alignment at the beginning and end of the project. The alignment shift at the beginning of the project would minimize stream impacts. In addition, the alignment would shift to symmetrical widening towards the end of the project in order to coincide with the beginning of EDS-545(30).

The revised concept as presented herein and submitted for approval is consistent with that which is included in the State Transportation Improvement Program (STIP).

DATE 9-25-01



State Transportation Planning Administrator

Distribution:

David Mulling
Philip Allen
Marta Rosen
Herman Griffin
Jim Chambers
Mike Thomas
Paul Liles

REVISED PROJECT CONCEPT REPORT

Need and Purpose: US 1/SR 4 is the major north-south corridor in mid-east Georgia. The proposed projects, EDS-545(29),(30),(31) & (32) would widen and reconstruct US 1/SR 4 from the Wadley Bypass to SR 88 in Wrens. The existing roadway is reaching capacity and improvements would be required to maintain an acceptable level of service. Improvements would also eliminate congestion, enhance the traffic flow, and increase capacity while improving the operational characteristics and the safety along US 1/SR 4.

The US 1/SR 4 Improvements are part of the Governor's Road Improvement Program (G.R.I.P.). G.R.I.P. was initiated in the 1980's to address the importance of stimulating economic growth via an improved transportation network. It identified a system of economic development highways that consist of existing primary routes, plus additional truck connector routes. The system would place 98 percent of the state's population within 20 miles of a multi-lane highway. It would provide access for oversized trucks to cities having populations between 2,000 people and 5,000 people. Among the many benefits of such a system, areas lagging in growth would be provided greater opportunities to attract industry, business and jobs.

Project Location: The proposed concept would be located along US 1/SR 4 and would begin at milepost 5.38 and end at milepost 11.90 in Jefferson County. The total length of the project would be approximately 6.5 miles.

Description of the approved concept: The approved concept for EDS-545(29) in Jefferson County is proposed to widen and reconstruct US 1/SR 4 from SR 4 Business north of Wadley to SR 4 Business south of Louisville. From the beginning of the project north of Wadley at CR 183, US 1/SR 4 would be widened on the west side to have four lanes with a 44 ft grassed median. The widening would continue on the west side to CR 248/Mole Rd. At that point, the median would taper down to 32 feet to minimize wetland impacts. Also at that point, the widening would shift to the east side of US 1/SR 4 and continue on the east to approximately 0.5 miles north of CR 326/Nimrod Rd. From there, the median would taper to 20 feet at the end of the project, at US 1/SR 4 Business in Louisville. Existing right-of-way along US 1/SR 4 varies from 130 feet to 200 feet. The proposed right-of-way would vary from 224 feet to 260 feet for the length of the project. The speed design varies from 45 mph to 65 mph, and access would be by permit.

PDP Classification: Major X Minor

Federal Oversight: Full Oversight (), Exempt (X), SF (), Other ()

Functional Classification: Rural Principal Arterial

U. S. Route Number(s): 1

State Route Number(s): 4

Traffic (AADT) as shown in the approved concept:

Current Traffic		Design Traffic	
Year: 1997	ADT: 4000 - 7550	Year: 2017	ADT: 6500 - 11,900

Proposed Features to be revised:

EDS-545(29)

1. The alignment is recommended for revision at the beginning and end of the project.

Revised feature(s) to be approved:

EDS-545(29)

1. In order to reduce stream impacts at Boggy Gut Creek, the project would be widened on the east side from the beginning of the project to just north of Boggy Gut Creek and then immediately transition to west side widening. The alignment would then continue as discussed in the approved concept to CR 326/Nimrod Rd. In order to line up with the proposed symmetrical widening at the beginning of project EDS-545(30), the proposed concept would shift from east side widening to symmetrical widening at CR 326/Nimrod Rd. It would continue symmetrical widening with a 32 foot median to a point approximately 600 feet south of US 1/SR 4 Business. At that point the typical section would taper down to a 14 foot flush median to coincide with the beginning of EDS-545(30), located approximately 200 feet north of existing US 1/SR 4 Business, at the relocated US 1/SR 4 Business. The proposed right-of-way would vary from 212 feet to 250 feet for the length of this project.

Updated traffic data (AADT):

Current Traffic		Design Traffic	
Year: 2010	AADT: 9800	Year: 2030	AADT: 15,100

Programmed/Schedule:

EDS-545(29)

P.E. FY 2002

R/W FY 2005

Construction FY 2007

Revised Cost Estimates:

EDS-545(29)

Construction cost including inflation and E&C:	\$ 16,190,000
Right-of-way:	\$ 1,768,200
Utilities:	\$ 66,000

Is the project located in a Non-attainment area? _____ Yes _____ X No

Recommendation: It is recommended that the proposed revisions to this concept be approved for implementation.

HDK/EKP

Attachments:

Sketch Map

Cost Estimate

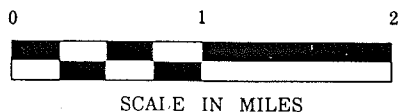
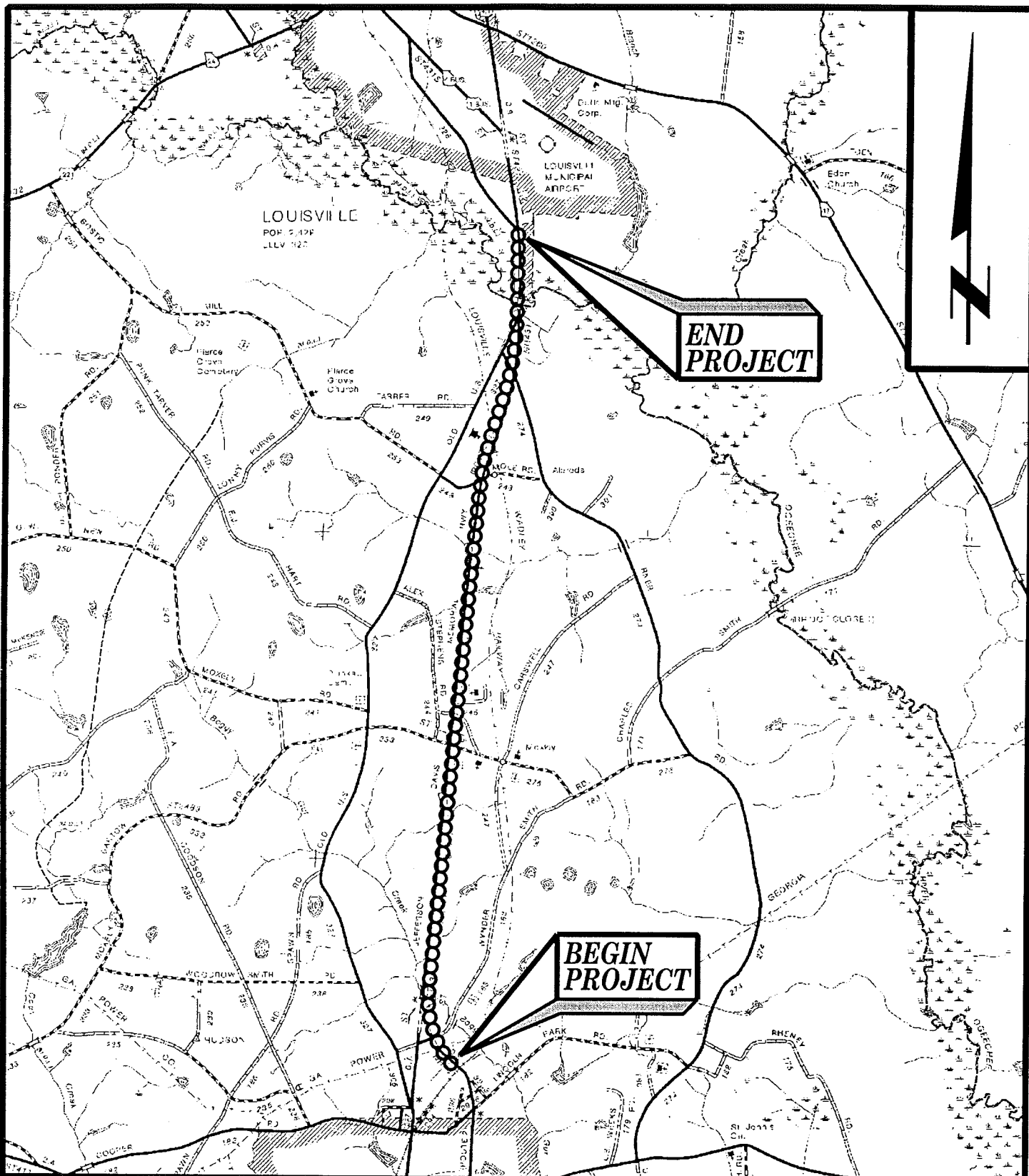
Typical Sections

Concur: _____

Thomas L. Turner, Jr.
Director of Preconstruction

Approve: _____

[Signature]
Chief Engineer



LOCATION

STRIP MAP

EDS-545(29)
US 1SR 4 IMPROVEMENTS
JEFFERSON COUNTY
P.I.# 222120

PRELIMINARY COST ESTIMATE

Office of Environment/Location

September 19, 2001

County(s)

PI Number Project Number

Project Name Project Length Miles

Project Description

US 1/SR 4 from Wadley Bypass to Louisville Bypass - Includes Bridges

Existing Roadway

2 Lanes Rural

Comments

TRAFFIC:

Current Design Year Daily Volume (AADT)

Future Design Year Daily Volume (AADT)

☒ Concept Estimate

☐ Feasibility Estimate

Typical Section(s) Used in Estimate

Typical Section Length

Rural Widening: 2 To 4-Lanes with 44 ft Divided Median	<input type="text" value="4.3"/> Miles
Rural Widening: 2 To 4-Lanes with 32 ft Divided Median	<input type="text" value="2.2"/> Miles
<input type="text"/>	<input type="text"/> Miles
<input type="text"/>	<input type="text"/> Miles
<input type="text"/>	<input type="text"/> Miles
<input type="text"/>	<input type="text"/> Miles

Prepared By

PROJECT COSTS**MAJOR STRUCTURES****1. Bridges: Stream Crossings & Grade Separations**

NO	LOCATION	QTY	TYPE *		W(FT)	L(FT)	UNIT COST	TOTAL
			S/G/R	W/N				
1	Ogeechee River at MP 10.60	1	S	W	13.3	580.0	120.00	926,000
2	Ogeechee River Overflow at MP 10.8	1	S	W	13.3	440.0	120.00	702,000
3	Ogeechee River at MP 10.60	1	S	N	41.3	580.0	54.00	1,294,000
4	Ogeechee River Overflow at MP 10.8	1	S	N	41.3	440.0	54.00	981,000
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								

* S = Stream Crossing G = Grade Separation R = Railroad W = Widening N = New

2. Bridge Culverts

NO	LOCATION	TYPE	SIZE	L(FT)	UNIT COST	TOTAL
		S/D/T/Q	W x H (FT)			
1	Boggy Gut Creek at MP 5.64	Double	10 x 12	135.0	1,385.19	187,000
2						
3						
4						
5						
6						
7						

3. Walls

NO	LOCATION	TYPE	H(FT)	L(FT)	UNIT COST	TOTAL
1						
2						
3						
4						
MAJOR STRUCTURES SUBTOTAL					\$	4,090,000

Typical Section

Rural Widening: 2 To 4-Lanes with 44 ft Divided Median

Typical Section Length MilesRight-of-Way Width Feet**GRADING AND DRAINAGE****1. EARTHWORK**

- a. Unclassified Excavation Soil
- b. Unclassified Excavation Rock
- c. Borrow Excavation

2. MINOR DRAINAGE

QUANTITY		UNIT COST	TOTAL
187,300	CY	2.60	487,000
20800	CY	10.00	208,000
	CY	2.44	
4.3	MI	100,927	434,000

GRADING AND DRAINAGE SUBTOTAL **\$1,129,000****BASE AND PAVING****1. GRADED AGGREGATE BASE****2. ASPHALT PAVING**

- a. Asph Conc 9.5 mm Superpave
- b. Asph Conc 19 mm Superpave
- c. Asph Conc 25 mm Superpave
- d. Bituminous Tack Coat

3. CONCRETE PAVING

- a. Curb and Gutter
- b. Miscellaneous

4. OTHER PAVING

THICKNESS AND SPREAD RATE	QUANTITY		UNIT COST	TOTAL
10"	56,456	TN	14.05	793,000
1 1/2" (165 LB/SY)	13,528	TN	39.10	529,000
3" (330 LB/SY)	17,066	TN	36.76	627,000
4" (440 LB/SY)	15,540	TN	36.76	571,000
	10,354	GL	0.99	10,000
	0	LF	9.88	0
	0	MI	28,410	0
				253,000
BASE AND PAVING SUBTOTAL				\$2,783,000

LUMP ITEMS

- 1. TRAFFIC CONTROL
- 2. CLEARING AND GRUBBING
- 3. LANDSCAPING
- 4. EROSION CONTROL
- 5. SIGNING/STRIPING
- 6. OTHER

QUANTITY		UNIT COST	TOTAL
4.3	MI	88,000	378,000
130	AC	6,000	782,000
4.3	MI	40,527	174,000
4.3	MI	99,000	426,000
4.3	MI	17,594	76,000
4.3	MI	110,500	475,000
LUMP ITEM SUBTOTAL			\$2,311,000

MISCELLANEOUS

- 1. GUARDRAIL
 - a. GUARDRAIL ANCHORS
- 2. DETOURS

QUANTITY		UNIT COST	TOTAL
3,200	LF	10.46	33,000
32	EA	1,455.79	47,000
	MI	300,000.00	0
MISCELLANEOUS SUBTOTAL			\$80,000

SPECIAL FEATURES

Typical Section

Rural Widening: 2 To 4-Lanes with 32 ft Divided Median

Typical Section Length MilesRight-of-Way Width Feet**GRADING AND DRAINAGE****1. EARTHWORK**

- a. Unclassified Excavation Soil
- b. Unclassified Excavation Rock
- c. Borrow Excavation

2. MINOR DRAINAGE

QUANTITY		UNIT COST	TOTAL
78,570	CY	2.60	204,000
8730	CY	10.00	87,000
	CY	2.44	
2.2	MI	87,763	193,000
GRADING AND DRAINAGE SUBTOTAL			\$484,000

BASE AND PAVING**1. GRADED AGGREGATE BASE****2. ASPHALT PAVING**

- a. Asph Conc 9.5 mm Superpave
- b. Asph Conc 19 mm Superpave
- c. Asph Conc 25 mm Superpave
- d. Bituminous Tack Coat

3. CONCRETE PAVING

- a. Curb and Gutter
- b. Miscellaneous

4. OTHER PAVING

THICKNESS AND SPREAD RATE	QUANTITY		UNIT COST	TOTAL
10"	28,885	TN	14.05	406,000
1 1/2" (165 LB/SY)	6,921	TN	39.10	271,000
3" (330 LB/SY)	8,731	TN	36.76	321,000
4" (440 LB/SY)	7,951	TN	36.76	292,000
	5,297	GL	0.99	5,000
	0	LF	9.88	0
	0	MI	28,410	0
BASE AND PAVING SUBTOTAL				\$1,425,000

LUMP ITEMS

- 1. TRAFFIC CONTROL
- 2. CLEARING AND GRUBBING
- 3. LANDSCAPING
- 4. EROSION CONTROL
- 5. SIGNING/STRIPING
- 6. OTHER

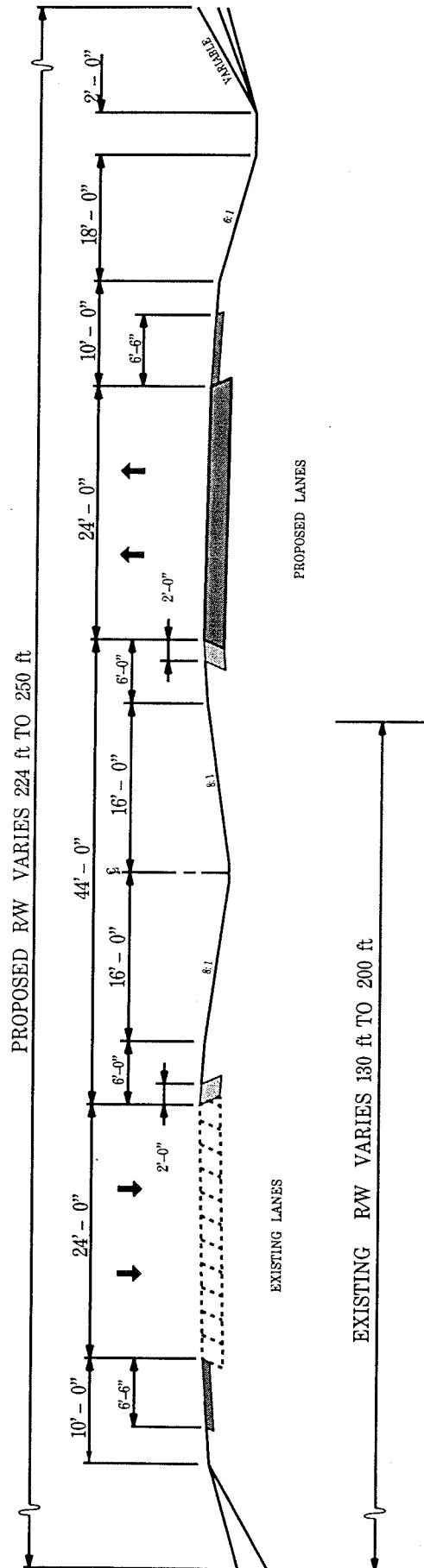
QUANTITY		UNIT COST	TOTAL
2.2	MI	76,522	168,000
59	AC	6,000	352,000
2.2	MI	29,474	65,000
2.2	MI	97,000	213,000
2.2	MI	17,594	39,000
2.2	MI	96,087	211,000
LUMP ITEM SUBTOTAL			\$1,048,000

ESTIMATE SUMMARY

Typical Section	Section Cost (per mile)
1. Rural Widening: 2 To 4-Lanes with 44 ft Divided Median	\$1,447,000
2. Rural Widening: 2 To 4-Lanes with 32 ft Divided Median	\$1,344,000

PROJECT COST

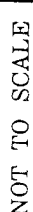
A. MAJOR STRUCTURES	\$4,090,000
B. GRADING AND DRAINAGE	\$1,613,000
C. BASE AND PAVING	\$4,208,000
D. LUMP ITEMS	\$3,359,000
E. MISCELLANEOUS	\$80,000
F. SPECIAL FEATURES	
SUBTOTAL CONSTRUCTION COST	\$13,350,000
E. & C. (10%)	\$1,335,000
INFLATION 2 yrs @ 5 % per yr	\$1,505,213
GRAND TOTAL CONSTRUCTION COST	\$16,190,000



EDS-545(29) JEFFERSON COUNTY

US 1 IMPROVEMENTS

from CR 183 north of Wadley
to CR 248 in Jefferson County



from CR 248 to US 1/SR 4 Business
in Louisville